
U.S. Department of the Interior • U.S. Geological Survey

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CRUSHED STONE AND SAND AND GRAVEL IN THE FIRST QUARTER OF 1997

An estimated 236 million metric tons of *crushed stone* were produced and shipped for consumption in the United States in the first quarter of 1997, an increase of 12.9% compared with the same period of 1996.

The estimated output of *construction sand and gravel* produced and shipped for consumption in the first quarter of 1997 was 160.8 million metric tons, an increase of 6.7% compared with the same period of 1996.

The above estimates are based on information reported to the U.S. Geological Survey quarterly sample survey by the *crushed stone* and *sand and gravel* producers. The increases in production of both *crushed stone* and *construction sand and gravel* are again mostly due to the continued high level activity in private and commercial construction work during the first quarter of 1997.

The USGS quarterly survey on domestic production of crushed stone and construction sand and gravel has become a significant indicator of construction activity at the national as well as State level. This survey is a sample survey that generates production for consumption estimates by quarters for each State, except Alaska and Hawaii, and each geographic division, based on information reported voluntarily by a limited number of producing companies. Occasionally, the number of companies reporting in an area varies from quarter to quarter, or previously reported data by some companies are revised. As a result of such changes in the size or the composition of the statistical sample, the estimated quantities for prior quarters are recalculated. The latest release of the Quarterly Mineral Industry Surveys contains the most recent estimated totals and percentage changes and supersedes previously published similar information.

The production for consumption estimates for *crushed stone* and *sand and gravel*, are generated independently for each State and geographic division which are treated as separate statistical sample areas. Therefore, some differences may exist between the total for a division and the sum of State totals that are part of the same geographic division.

The U.S. *crushed stone* production for consumption in the first quarter of 1997 increased in all geographic divisions except West South Central. Major increases were recorded in the East North Central (28.6%), New England (27.3%), and Middle Atlantic and South Atlantic (18.8%).

The leading geographic divisions for the total amount of *crushed stone* sold or used in the first quarter of 1997 were the South Atlantic with 70.3 million metric tons, or 29.8% of the U.S. total, followed by the East North Central with 33.9 million metric tons or 14.4%, and the West South Central division with 30.6 million metric tons or 13.0% of the total.

The estimated *construction sand and gravel* sold or used in the first quarter of 1997 increased in all geographic divisions except the East South Central, West South Central, and the Mountain. Major increases were recorded in the New England (35.3%), followed by the Pacific (21.9%), and East North Central (20.8%).

The leading geographic divisions for the total amount of *construction sand and gravel* sold or used in the first quarter of 1997 were the Pacific with 35.2 million metric tons, or 21.9% of the U.S. total, followed by the Mountain with 33.5 million metric tons, or 20.8%, and the East North Central with 22.1 million metric tons, or 13.7% of the total. The estimated totals by quarters for the geographic divisions do not include Alaska and Hawaii.

Despite the increases recorded at the national level, production for consumption of *crushed stone* declined in the first quarter of 1997 in Arkansas, Florida, Idaho, New Mexico, Oregon, Texas, Utah, and Wyoming. The five leading States in the production for consumption of *crushed stone* in the first quarter of 1997 were Texas, Florida, Georgia, Pennsylvania, and Missouri. Their combined total production for consumption represented 31.9% of the U.S. total.

Production for consumption of *construction sand and gravel* declined in 17 of the 44 estimated States, with major decreases in terms of percentages being recorded for Vermont (-35.9), New Mexico (-24.0), Pennsylvania (-23.9), Louisiana (-23.5), and Texas (-20.3). The five leading States in the production for consumption of *sand and gravel* in the first quarter of 1997 were California, Texas, Arizona, Washington, and Colorado. Their combined total production for consumption represented

37.4% of the U.S. total.

A total of 382 companies representing *crushed stone* and *construction sand and gravel* producers reported production for consumption information to the first quarter sample survey. The large participation of the producing companies in this survey is reflected by the very good percentage coverage obtained for most geographic divisions and States. The percentage coverage indicates how much of the total estimated production for consumption for a State or a geographic division was actually reported by companies participating in this survey and was used to generate the estimated totals for that particular area.

The percent changes between the estimated production for consumption for the current quarter and the same quarter of the prior year included in this report, are important indicators of the production/consumption trends occurring in a particular area of the country.

TABLE 1
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/
(Thousand metric tons and thousand dollars)

Region/Division	1996						1997			
	Quantity					Value	Quantity	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	1st Qtr.	2nd Qtr.	3th Qtr.	4th Qtr.	Total 2/	total 2/				
Northeast:										
New England	1,500	7,500	8,900	7,300	25,100	180,000	1,900	27.3	53	17
Middle Atlantic	17,400	41,800	50,500	42,500	152,000	899,000	20,700	18.8	57	40
Midwest:										
East North Central	26,300	65,800	88,700	68,500	249,000	1,150,000	33,900	28.6	68	49
West North Central	22,500	40,200	48,100	39,400	150,000	756,000	25,900	15.1	51	43
South:										
South Atlantic	59,200	88,600	88,100	82,200	318,000	1,930,000	70,300	18.8	81	54
East South Central	25,500	42,600	47,600	39,800	156,000	710,000	29,500	15.8	65	21
West South Central	34,100	36,000	39,300	35,600	145,000	661,000	30,600	-10.1	65	31
West:										
Mountain	5,800	9,600	10,400	8,600	34,400	192,000	6,300	7.3	54	20
Pacific 5/	16,700	22,000	24,900	22,200	85,800	476,000	17,000	1.3	40	25
Total 2/	209,000	354,100	406,400	346,100	6/1,330,000	6/7,110,000	236,000	12.9	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska, Hawaii, and "Other" totals; see Table 2, footnote 6.

TABLE 2
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/
(Thousand metric tons and thousand dollars)

State	1996						1997			
	Quantity					Value	Quantity	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2/	total 2/				
Alabama	7,800	10,700	10,700	9,700	38,900	204,000	8,400	7.9	83	13
Alaska 5/ 6/	--	--	--	--	3,500	21,500	--	--	--	--
Arizona 7/	--	--	--	--	5,250	31,200	--	--	--	--
Arkansas	5,600	6,900	7,300	6,500	26,400	177,000	5,100	-8.6	59	10
California 6/	8,900	11,800	14,100	11,900	46,700	289,000	9,200	2.4	45	12
Colorado	1,300	3,100	3,000	2,500	9,950	65,100	2,000	49.2	68	6
Connecticut 6/	100	1,800	2,300	1,100	5,310	40,100	100	7.8	40	4
Delaware 5/	--	--	--	--	--	--	--	--	--	--
Florida	18,000	18,100	17,600	17,600	71,300	371,000	16,500	-8.6	64	10
Georgia	12,600	18,600	17,500	15,600	64,300	399,000	14,000	11.3	93	9
Hawaii 5/ 6/	--	--	--	--	7,700	76,200	--	--	--	--
Idaho 6/	300	300	800	700	2,120	9,340	300	-3.8	40	3
Illinois	7,000	16,500	23,600	19,400	66,500	365,000	8,000	14.6	63	11
Indiana 6/	7,200	13,400	19,400	14,600	54,600	262,000	10,200	41.1	77	14
Iowa	4,400	10,000	11,900	9,100	35,400	212,000	5,700	28.0	48	8
Kansas	4,200	6,300	6,400	6,400	23,400	111,000	4,600	9.5	63	11
Kentucky 6/	7,600	14,900	21,500	15,200	59,200	252,000	9,900	29.3	39	8
Louisiana 6/ 7/	--	--	--	--	2,650	27,900	--	--	--	--
Maine	300	900	1,100	800	3,160	16,400	400	25.2	48	4
Maryland	3,500	7,300	7,900	7,700	26,400	174,000	6,400	83.2	86	9
Massachusetts	600	2,600	2,900	3,000	9,020	79,400	700	22.6	81	5
Michigan	2,600	11,200	13,700	11,400	38,900	132,000	2,800	7.5	77	10
Minnesota 6/	500	3,400	5,200	2,900	12,100	51,500	500	2.2	63	5
Mississippi 6/ 7/	--	--	--	--	2,300	9,300	--	--	--	--
Missouri 6/	12,300	17,200	19,400	18,100	67,000	315,000	13,400	9.2	43	17
Montana 6/ 7/	--	--	--	--	2,290	9,720	--	--	--	--
Nebraska	1,000	1,900	2,000	1,700	6,680	42,800	1,300	26.2	87	6
Nevada	500	600	700	600	2,370	21,200	600	13.1	31	3
New Hampshire 6/	90	500	800	600	1,990	8,570	200	113.4	86	4
New Jersey	2,200	5,700	6,500	6,800	21,200	134,000	3,100	39.7	55	7
New Mexico	600	1,200	900	700	3,350	17,200	600	-7.2	34	4
New York	3,400	11,300	17,000	11,900	43,600	227,000	4,000	17.4	60	10
North Carolina	9,900	16,800	16,400	15,600	58,600	395,000	12,900	31.3	95	13
North Dakota 5/	--	--	--	--	--	--	--	--	--	--
Ohio	7,000	18,000	22,300	16,200	63,600	280,000	9,800	39.1	68	14
Oklahoma 6/	6,700	7,600	8,000	7,200	29,500	119,000	6,900	2.1	76	11
Oregon	4,500	6,400	5,900	5,200	21,900	102,000	4,100	-9.0	38	11
Pennsylvania	11,900	24,900	26,800	23,900	87,400	538,000	13,700	15.4	56	22
Rhode Island 7/	--	--	--	--	1,100	8,090	--	--	--	--
South Carolina	4,900	6,700	6,500	5,800	23,800	143,000	5,400	9.7	101	9
South Dakota 6/	500	1,300	2,600	1,300	5,630	27,000	800	54.9	65	5
Tennessee	8,100	15,700	16,800	14,600	55,100	245,000	9,900	22.7	74	8
Texas	20,900	20,700	23,600	21,200	86,400	333,000	17,800	-14.6	58	12
Utah	900	800	1,100	1,100	4,000	14,400	800	-12.7	84	4
Vermont 7/	--	--	--	--	4,560	21,400	--	--	--	--
Virginia	8,800	16,600	17,900	16,400	59,700	352,000	12,600	43.1	72	12
Washington 6/	3,400	3,700	4,700	5,400	17,200	84,500	3,900	15.8	27	4
West Virginia 6/	2,100	4,000	4,200	3,600	14,000	89,300	2,300	5.6	52	7
Wisconsin	2,400	6,500	10,000	6,800	25,800	108,000	2,800	14.8	47	9
Wyoming	700	1,600	1,700	1,100	5,050	29,800	600	-11.5	84	4
Other	--	--	--	--	7,000	73,500	--	--	--	--
Total	XX	XX	XX	XX	1,330,000	7,110,000	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ To avoid disclosing proprietary data, certain State totals do not include all kinds of stone produced within the State; the portion not shown has been included with "Other."

7/ Due to a low number of reporting companies, no production estimates by quarters were generated.

TABLE 3
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/
(Thousand metric tons and thousand dollars)

Region/Division	1996						1997			
	Quantity					Value	Quantity	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	1st Qtr.	2nd Qtr.	3th Qtr.	4th Qtr.	Total 2/	total 2/				
Northeast:										
New England	5,100	12,200	15,400	11,400	44,100	247,000	6,900	35.3	15	22
Middle Atlantic	7,000	16,200	19,500	14,900	57,700	311,000	7,300	4.4	26	26
Midwest:										
East North Central	18,300	53,900	71,300	54,200	198,000	745,000	22,100	20.8	43	52
West North Central	11,000	30,600	39,800	24,400	106,000	340,000	12,600	14.5	23	38
South:										
South Atlantic	14,700	19,900	20,200	17,900	72,700	316,000	16,500	12.4	46	39
East South Central	7,500	12,600	12,800	10,300	43,100	181,000	7,400	-0.6	37	21
West South Central	23,400	28,200	25,300	22,900	99,800	441,000	19,300	-17.7	35	15
West:										
Mountain	34,800	44,800	44,800	40,300	165,000	722,000	33,500	-3.9	38	31
Pacific 5/	28,900	45,600	52,100	41,700	168,000	858,000	35,200	21.9	47	26
Total 2/	150,700	264,000	301,300	238,100	6/968,000	6/4,210,000	160,800	6.7	XX	XX

XX Not applicable.

1/Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by regions.

3/All percentage changes are calculated using unrounded totals.

4/Number of companies reporting for the quarterly survey.

5/Does not include Alaska and Hawaii.

6/Includes Alaska and Hawaii.

TABLE 4
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/
(Thousand metric tons and thousand dollars)

State	1996						1997			
	Quantity					Value	Quantity	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2	total 2/				
Alabama	3,100	4,000	3,800	3,400	14,400	60,500	2,600	-17.4	39	8
Alaska 5/	--	--	--	--	13,900	50,000	--	--	--	--
Arizona	9,800	11,100	10,500	9,700	41,100	207,000	8,900	-9.6	66	8
Arkansas	2,500	2,900	2,900	2,400	10,700	45,100	2,100	-13.4	56	4
California	18,800	29,400	32,800	27,000	108,000	602,000	23,100	23.2	55	14
Colorado	5,400	10,600	11,500	8,600	36,100	150,000	6,800	26.8	38	7
Connecticut	800	2,200	2,600	1,800	7,380	43,600	900	20.8	20	5
Delaware 6/	--	--	--	--	3,660	12,100	--	--	--	--
Florida	4,800	5,300	5,100	4,900	20,200	72,800	4,900	1.1	57	9
Georgia	1,400	1,900	1,800	1,600	6,630	26,900	1,300	-4.0	30	6
Hawaii 5/	--	--	--	--	400	4,000	--	--	--	--
Idaho	3,200	3,100	3,900	4,400	14,600	48,900	2,900	-7.3	22	4
Illinois	3,300	10,500	12,300	9,900	36,000	147,000	3,900	20.2	43	10
Indiana	2,900	7,400	9,700	6,500	26,400	100,000	3,500	20.8	54	10
Iowa	1,100	4,500	6,400	2,800	14,900	60,400	1,100	-1.9	23	7
Kansas	2,000	5,600	4,300	3,200	15,000	40,400	2,300	17.7	27	6
Kentucky	1,000	2,000	2,200	1,800	7,010	25,700	1,300	26.5	24	3
Louisiana	2,800	3,300	2,900	2,800	11,700	52,200	2,100	-23.5	55	4
Maine	700	2,000	2,600	1,600	6,790	28,500	600	-17.8	12	4
Maryland	1,600	2,600	3,400	2,600	10,200	65,400	2,700	67.8	38	6
Massachusetts	2,200	3,900	4,900	4,100	15,000	87,200	3,100	43.5	15	6
Michigan	4,200	13,900	21,200	15,400	54,700	186,000	5,600	31.8	44	10
Minnesota	3,600	8,400	12,500	8,600	33,000	104,000	2,900	-18.8	24	11
Mississippi	2,200	3,800	4,000	3,000	13,000	59,300	2,100	-1.8	44	6
Missouri	1,400	3,100	3,600	2,500	10,600	39,200	1,900	29.2	43	5
Montana 6/	--	--	--	--	8,210	32,800	--	--	--	--
Nebraska	900	3,800	6,300	3,400	14,300	49,300	1,900	115.7	19	6
Nevada	5,500	5,400	4,900	5,200	21,100	103,000	4,800	-13.0	43	4
New Hampshire	600	1,600	2,300	1,600	6,130	29,400	1,200	94.4	25	4
New Jersey	1,700	3,800	3,200	4,000	12,700	73,900	2,500	50.3	25	4
New Mexico	2,600	2,900	2,800	2,700	11,000	53,800	2,000	-24.0	41	3
New York	3,300	8,300	10,800	7,300	29,700	147,000	3,500	4.6	20	11
North Carolina	2,000	2,700	2,900	2,700	10,300	51,600	3,000	50.7	34	5
North Dakota 6/	--	--	--	--	8,500	24,200	--	--	--	--
Ohio	4,700	12,700	16,400	13,300	47,100	205,000	6,000	28.5	45	17
Oklahoma	1,700	2,400	2,100	1,900	8,140	26,400	1,800	3.8	38	6
Oregon	2,800	4,600	6,300	5,300	19,000	89,300	3,500	25.6	27	4
Pennsylvania	1,900	4,100	5,500	3,700	15,300	84,400	1,400	-23.9	37	12
Rhode Island 6/	--	--	--	--	3,000	23,300	--	--	--	--
South Carolina	2,100	2,900	2,700	2,300	9,950	32,800	2,300	9.1	44	6
South Dakota	500	2,600	4,500	2,000	9,530	29,100	900	76.8	17	5
Tennessee	1,000	2,700	2,900	2,100	8,680	39,900	1,500	44.9	33	6
Texas	16,600	19,700	17,300	15,700	69,300	308,000	13,200	-20.3	27	7
Utah	3,200	8,700	10,600	7,800	30,200	103,000	4,200	32.5	14	3
Vermont	600	1,700	2,000	1,500	5,770	19,900	400	-35.9	13	3
Virginia	1,900	2,900	2,900	2,600	10,200	44,900	1,800	-2.2	63	8
Washington	7,000	11,500	13,400	9,300	41,300	171,000	8,100	15.5	35	8
West Virginia	200	500	500	400	1,600	6,890	200	5.7	100	4
Wisconsin	3,100	9,500	11,600	9,300	33,500	107,000	2,700	-13.9	33	12
Wyoming	500	900	500	600	2,450	11,300	600	27.1	21	3
Total	XX	XX	XX	XX	968,000	4,210,000	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Due to a low number of reporting companies, no production estimates by quarters were generated.